

Philippe Magnier

It is believed that no fees are due in connection with the filing of this Preliminary Amendment. However, if any fees are due, the Assistant Commissioner is hereby authorized to deduct said fees from Conley, Rose & Tayon Deposit Account No. 50-1505/5310-03400/EBM.

Respectfully submitted,



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Strikethrough Version of Amended Claims

1. (Amended) Device for prevention against explosion of an electrical transformer (13) comprising an enclosure filled with combustible coolant, and a ~~means for decompressing decompression element coupled to the enclosure and configured to decompress~~ the enclosure of the transformer ~~during use~~, characterized in that the decompression means ~~wherein the decompression element~~ comprises a rupture element (1) ~~provided with~~ comprising a retention part (4), ~~the retention part comprising including~~ first zones which have a reduced thickness in comparison with the rest of the retention part and are capable of tearing without fragmenting when the ~~said element~~ ~~rupture element~~ ruptures, and second zones which have a reduced thickness in comparison with the rest of the retention part and are capable of folding without tearing when the ~~said element~~ ~~rupture element~~ ruptures, the ~~said~~ rupture element being capable of breaking when the pressure inside the enclosure (14) exceeds a predetermined ceiling.
2. (Amended) Device according to Claim 1, characterized in that ~~wherein~~ the rupture element (1) is ~~provided with~~ ~~further comprises~~ a sealing component which is arranged on the coolant side ~~of the enclosure~~ and is capable of closing off small-diameter holes (6) formed in the retention part.
3. (Amended) Device according to Claim 2, characterized in that ~~wherein~~ the sealing component is in the form of a lining (9) on the retention part, the ~~said~~ lining being ~~preferably based on composed of~~ polytetrafluoroethylene.
4. (Amended) Device according to ~~any one of the preceding claims, characterized in that claim 1, wherein~~ the retention part has a domed shape with convexity ~~outwards~~, on the opposite side to the coolant.

5. (Amended) Device according to ~~any one of the preceding claims, characterized in that claim 1, wherein~~ the retention part is ~~metallic~~, made of stainless steel, ~~aluminium~~ aluminum or ~~aluminium~~ aluminum alloy.

6. (Amended) Device according to ~~any one of the preceding claims, characterized in that it comprises~~ claim 1, further comprising a rupture-detection ~~means~~ element integrated with the rupture element.

7. (Amended) Device according to Claim 6, ~~characterized in that~~ wherein the rupture-detection element comprises an electrical wire (11) capable of breaking at the same time as the rupture element (1), the electrical wire being adhesively bonded on the rupture element.

8. (Amended) Device according to Claim 7, ~~characterized in that~~ wherein the electrical wire is arranged on the opposite side of the retention part to the coolant, the electrical wire being covered with a protective film (12).

9. (Amended) System for prevention against explosion of an electrical transformer (13) comprising an enclosure (14) filled with combustible coolant, ~~and a means for decompressing the enclosure of the transformer, characterized in that it comprises a plurality of devices according to any one of the preceding claims, including one on a main~~ the enclosure (14) containing the ~~comprising~~ windings, and ~~one on each~~ an on-load tap changer (32), ~~wherein decompression elements are coupled to the main enclosure and the on-load tap changer, wherein each of the decompression elements comprise a rupture element comprising a retention part, the retention part comprising first zones which have a reduced thickness in comparison with the rest of the retention part and are capable of tearing without fragmenting when the rupture element ruptures, and second zones which have a reduced thickness in comparison with the rest of the retention part and are capable of folding without tearing when the rupture element ruptures, the rupture~~

element being capable of breaking when the pressure inside the enclosure exceeds a predetermined ceiling.

10. (Amended) System according to Claim 9, characterized in that it comprises at least one device according to any one of the preceding claims, or at least further comprising one an electrical feed-through (36) wherein an additional decompression element is coupled to the electrical feed-through.

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Strikethrough Version of Abstract

Device for prevention against explosion of an electrical transformer ~~comprising including~~ an enclosure filled with combustible coolant, and a means for decompressing the enclosure of the transformer. The decompression means ~~comprises includes~~ a rupture element † with integrated explosion detector provided with a retention part 4 including first zones which have a reduced thickness in comparison with the rest of the retention part 4 and are capable of tearing without fragmenting when the ~~said~~ element † ruptures, and second zones which have reduced thickness in comparison with the rest of the retention part 4 and are capable of folding without tearing when the ~~said~~ element † ruptures. The ~~said~~ rupture element † is capable of breaking when the pressure inside the enclosure exceeds a predetermined ceiling. The signal from an explosion detector integrated with the rupture disc triggers a cooling system and prevents oxygen from coming into contact with the explosive gases generated by the electric arc in contact with the oil.

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